

USPTO Customer No. 25280

Case 5424A

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for nucleating syndiotactic polypropylene comprising the steps of:
  - (a) providing a thermoplastic formulation comprising syndiotactic polypropylene;
  - (b) introducing at least one nucleating agent therein, wherein said at least one nucleating agent exhibits nucleation properties within syndiotactic polypropylene such that it induces a crystallization temperature of at least 71°C for a thermoplastic formulation comprising from 70-75% by weight of syndiotactic polypropylene, when analyzed under a modified ASTM Test Method D-794-85 wherein the cooling rate is 20°C/min and such that the syndiotactic polypropylene comprises a combination of Cell II crystal structures and Cell III crystal structures, wherein the Cell II/Cell III content ratio is at least 45/55 as analyzed under a modified Test Method D-794-85 wherein the cooling rate is 20°C/min; and
  - (c) allowing the resultant formulation of step "b" to cool.
2. (New) The method as recited in claim 1, wherein following cooling the thermoplastic formulation exhibits haze characteristics of not greater than about 16% as measured using ASTM test method D 1003-92.
3. (New) The method as recited in claim 1, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 900 MPa as measured using ASTM test method D790-98, procedure B.

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4. (New) The method as recited in claim 3, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 920 MPa as measured using ASTM test method D790-98, procedure B.
5. (New) The method as recited in claim 3, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 940 MPa as measured using ASTM test method D790-98, procedure B.
6. (New) The method as recited in claim 3, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 950 MPa as measured using ASTM test method D790-98, procedure B.
7. (New) The method as recited in claim 1, wherein said at least one nucleating agent comprises Cis-Calcium Hexahydrophthalate.
8. (New): The method as recited in claim 7, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 900 MPa as measured using ASTM test method D790-98, procedure B.
9. (New): The method as recited in claim 7, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 920 MPa as measured using ASTM test method D790-98, procedure B.

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10. (New): The method as recited in claim 7, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 940 MPa as measured using ASTM test method D790-98, procedure B.
11. (New): The method as recited in claim 1, wherein said at least one nucleating agent comprises disodium bicyclo [2.2.1] heptane – 2,3-dicarboxylate.
12. (New): The method as recited in claim 11, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 900 MPa as measured using ASTM test method D790-98, procedure B.
13. (New): The method as recited in claim 11, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 930 MPa as measured using ASTM test method D790-98, procedure B.
14. (New): The method as recited in claim 11, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 950 MPa as measured using ASTM test method D790-98, procedure B.

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15. (New): A method for nucleating syndiotactic polypropylene comprising the steps of:

(c) providing a thermoplastic formulation comprising syndiotactic polypropylene;

(d) introducing at least one nucleating agent therein, wherein said at least one nucleating agent exhibits nucleation properties within syndiotactic polypropylene such that it induces a crystallization temperature of at least 71°C for a thermoplastic formulation comprising from 70-75% by weight of syndiotactic polypropylene, when analyzed under a modified ASTM Test Method D-794-85 wherein the cooling rate is 20°C/min and such that the syndiotactic polypropylene comprises a combination of Cell II crystal structures and Cell III crystal structures, wherein the Cell II/Cell III content ratio is at least 45/55 as analyzed under a modified Test Method D-794-85 wherein the cooling rate is 20°C/min; and

(c) allowing the resultant formulation of step "b" to cool wherein following cooling the thermoplastic formulation exhibits haze characteristics of not greater than about 16% as measured using ASTM test method D 1003-92.

16. (New) The method as recited in claim 15, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 900 MPa as measured using ASTM test method D790-98, procedure B.

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17. (New) The method as recited in claim 15, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 920 MPa as measured using ASTM test method D790-98, procedure B.

18. (New) The method as recited in claim 15, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 940 MPa as measured using ASTM test method D790-98, procedure B.

19. (New) The method as recited in claim 15, wherein following cooling the thermoplastic formulation is characterized by a flexural modulus of not less than about 950 MPa as measured using ASTM test method D790-98, procedure B.